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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,340	03/30/2004	Carl Derson	GAS-14771.001	5088
27504	7590	06/12/2006		
RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET WILLOUGHBY, OH 44094-7836			EXAMINER MASINICK, MICHAEL D	
			ART UNIT 2125	PAPER NUMBER

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,340

Applicant(s)

DERSON ET AL.

Examiner

Michael D. Masinick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-16,18,19 and 29-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-16, 18, 19, 29-44 is/are rejected:
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1, 4-16, 18, 19, 29-44 are pending in this application. As applicant has amended claims, the rejection is modified below. All previous USC 102 rejections are removed.

Response to Arguments/Amendment

Examiner appreciates the claim amendments made to clarify the assembly line and the concept of extending a physical length of a processing station. This USC 112 rejection is removed as the record is now clear as to the meaning of this claim element.

Applicant's unnecessarily aggressive response to the remainder of the rejections is not found to be persuasive. Applicant suggests:

Further, it is noted that the Examiner may not simply disregard the steps following the step of "if the upstream processing function in the upstream processing station is not completed". Clearly, the present method can only be performed if all of the steps are performed, and the Examiner's disregard of specific method steps is contrary to the fundamentals of US patent law and, frankly, the first time that the undersigned has ever experienced a rejection based upon such a novel position by an Examiner. If the Examiner intends to maintain this rejection and not consider each step of the method, the undersigned would appreciate receiving further information, and authoritative support (i.e., MPEP, case law, etc.) for the Examiner's position.

Applicant's position in this matter is simply incorrect. The word "if" is a conditional phrase which must first be satisfied before the claim elements following the "if" are to be executed in the method presented. The **fundamentals of US Patent Law**

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dictate that the claims must be clearly written and the metes and bounds of the claims be made clear. The change from the term “if” to “when” does not change the conditionality of this claim language. See MPEP 2173.05(h) for authoritative support for the Examiner’s position.

Applicant notes “Clearly, the present method can only be performed if all of the steps are performed”. This is correct. However, this does not mean that the **claim** can not be read upon unless all steps are performed. A very basic assembly line currently reads on the independent claims in this case. In a basic assembly line system, items are moved into the processing area, and when processing is complete, they are marked as completed and moved to the next station. While the Shiminaka reference provides much more detail as to how the operation of the assembly line works, this reference, at its core, is a simple assembly line with upstream and downstream processing and a networked messaging system.

The claims have not set forth that the time period of monitoring is predetermined based on an entry time, or how the monitoring period is even determined. The monitoring period, as shown by a basic assembly line, would be the time between entry and exit of the processing station. If it is unclear how the monitoring period is even calculated, it is unclear how that monitoring period can be exceeded.

As noted above, examiner’s position is that the monitoring period in a basic assembly line is from the entry point of a product to be processed and the exit point of the product to be processed. Basic assembly lines are not moving and the item only moves on to the next station when the work is completed.

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It is believed that the novel concepts set forth by applicant in arguments is that there is a predetermined monitoring period (a clock starts when the item enters the area?) which, when exceeded without process completion, causes a physical processing length in a MOVING assembly line to be extended. This sentiment does not currently transfer into the claims as they are written. It is noted that this concept, if applied to the claims, would be considered allowable pending an additional search by the examiner.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 44 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The phrase “thereby temporarily resulting in both the first and second articles being present in the first extended processing station” is not found in the specification as filed. Furthermore, it is not fully understood that the “first extended processing station” is different than the “first processing station” or if the “first extended processing station” is considered a different station than the “first processing station”.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-16, 18, 19, 29-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,088,045 to Shimanaka et al in view of Japanese Patent JP02030446A to Tsuru et al.

3. Referring to claim 1, 18, 19, 29, 43, and 44 Shiminaka shows a method of controlling an assembly line, comprising the steps of: providing an article assembly line (Figure 2); designating a first processing station on the assembly line (Column 3, lines 30-51); providing an entry signal to be representative of an arrival of an article in the first processing station and/or an exit signal to be representative of a departure of the article from the first processing station (Column 8, lines 54-59); delivering a first article to the first processing station (articles must be delivered to processing stations in any manufacturing plant); monitoring the designated processing function on the first article within the first processing station over a monitoring period according to the entry and/or exit signal (Column 2, lines 42-65).

4. Shiminaka does not specifically show that the processing station will stop the conveyor until all processing is finished, then the conveyor will restart and the product will move to the next station.

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5. Tsuru shows a torque theatre where when a faulty tightening signal is received, the conveyor is stopped until the problem is corrected, then the conveyor is restarted and the processing moves to the next station.

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the stopping technique of Tsuru to correct any problems found in Shiminaka because it would ensure that “the occurrence of the products assembled based on any erroneous work can be certainly prevented” (Tsuru abstract).

7. Examiner notes that the concepts seen by one of ordinary skill in the art provide a simple stopping mechanism when work is not completed. Since the claims in the current case as written do not appear to start a time limit, the claimed “monitoring period” starts when the car enters the processing station and finishes when the car leaves the processing station. Under this system the processing can never be left unfinished during the monitoring period and therefor the remainder of the claim language is never reached.

8. Referring to claims 4-10, 30-35, these claims recite elements that are in a conditional loop of the claim language and therefore are never reached. These claim elements are considered allowable if the changes are made to the claim to make it a non-conditional claim element as noted above by the examiner.

9. Referring to claims 11-13, 36-38, Shimanaka shows wherein the assembly line is a vehicle assembly line, the processing station is a torque theatre, and wherein the monitoring step includes counting the number of correct torque functions executed in the torque theatre (Results of the torque testing functions are shown in Figure 5).

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10. Referring to claim 14, Shimanaka shows wherein the step of monitoring includes the steps of providing a torque tool and sensing the operation of the torque tool to determine when the torque tool is operating within a first set of predetermined conditions to register a correct torque function and to determine when the torque tool is operating within a second set of predetermined conditions to register an incorrect torque function (Column 9, lines 56-60).

11. Referring to claim 15 and 39, Shimanaka shows wherein the step of monitoring includes step of providing a map of torque targets to be hit during a predetermined torque sequence (Figure 3).

12. Referring to claims 16 and 40, Shimanaka shows wherein the step of monitoring includes the step of recording the location of the torque tool relative to the map, and storing the location of the torque tool and a predetermined torque condition of the torque tool at each location (Figure 5).

13. Specifically regarding independent claim 18, the claim simply states that the process of claim 1 is done on two processing stations at the same time. This does not change the function of the claim itself and one of ordinary skill in the art would understand that you can run the process on any number of processing stations as required.

14. Referring to claim 41, Shimanaka shows wherein the assembly line is operable to travel along a flow path a predetermined direction. Examiner notes that this is part of any assembly line.

15. Referring to claim 42, Shimanaka shows wherein the assembly line is operable to travel along a flow path in more than one predetermined direction (Column 10, lines 40-

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62).

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

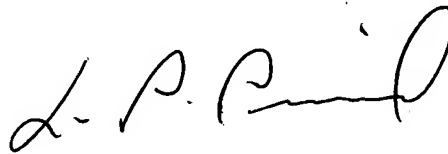
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Masinick whose telephone number is (571) 272-3746. The examiner can normally be reached on Mon-Fri, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MDM, June 8, 2006

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100